

# Point-of-care testing helps to expedite care and reduce emergency department wait times

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Beth Israel Deaconess (BID) Hospital–Needham is a 58-bed community hospital in the suburbs of Boston. Their emergency department (ED) has 19 private rooms as well as a separate pediatric waiting room. The BID–Needham ED has a direct link to Beth Israel Deaconess Medical Center should patients need to be transferred for more advanced care. Annually, the ED at BID–Needham sees approximately 16,900 visits.

## Challenge

Like many hospital EDs, BI–Needham experiences crowding and is always looking for opportunities to reduce patient wait times.

## Action

About five years ago, the ED decided to implement point-of-care testing in order to expedite testing and reduce wait times for patients. An ED technician, under supervision of the central lab, is able to run the following tests:

- Chemistry panel
- Basic hematocrit
- Lactate
- INR
- Urine pregnancy tests

Providers can receive results in as quickly as 60 seconds as opposed to 20-30 minutes if sent to the hospital's central lab. This allows providers to quickly create treatment and disposition plans.

In addition to the initial setup and certification challenges one would expect, the BID–Needham team needed to ensure that these point-of-care tests were just as accurate as traditional lab orders, thus helping the rest of the hospital buy in to the use of point-of-care labs in the ED. This requires rigorous quality control and cross checking with traditional lab orders to demonstrate their accuracy. The ED also keeps a list of rare medication/lab interactions that can affect results. Another challenge was that providers would order both point-of-care testing and central lab testing, thus duplicating work and costs. Staff had to be educated to only order from one source unless there was a reason for concern.

This process was developed in coordination with the central lab and their leadership, and operates under the lab's CLIA license. As Dr. Peter Smulowitz explains, the stakeholders started this project with the question, "What's the right thing for my patients?" rather than, "What's the right thing for my department?" and have been able to avoid the usual conflicts over turf. This close collaboration between the ED and the Central Lab has facilitated rapid and safe testing that leads to more timely patient care.

## What is point-of-care testing?

Point-of care-testing is the rapid analysis of lab tests within the care setting instead of sending them to a central lab. Point of care testing allows for timelier patient care.